

Claims

1. A system for providing integrated control of at least one communication service provided by at least one communication service provider comprising:

at least one integrated services controller (ISC) connectable to a plurality of communications networks so as to communicate with system entities, wherein the at least one ISC is configured to dynamically receive a message registration list (MRL) through an interactive exchange of one or more commands, registering one or more messages each of the at least one communication services has a notification interest in; and

2. The system of claim 1 wherein the at least one ISC is further configured to provide centralized prioritized processing for the one or more messages exchanged with the other system entities through use of intelligent prioritization rules.

3. The system of claim 1 wherein the at least one ISC is further configured to control the at least one communication service for an individual person customer.

4. The system of claim 2 wherein the at least one ISC is further configured as a child member within a group all related to a parent ISC that manages a customer group of related individual persons or a group of related ISC groups.

5. The system of claim 1 wherein the at least one ISC is further configured to control the at least one communication service for a plurality of individual person customers.

6. The system of claim 1 wherein the at least one ISC is further configured to monitor the high-level current state of each of the at least one communication services.

7. The system of claim 2 wherein the intelligent prioritization rules are dynamically configurable by the at least one communications service provider so as to effect the prioritization of the at least one communication services by the at least one ISC.

8. The system of claim 1 wherein the message registration list (MRL) is statically established with the at least one ISC through parameters set within the at least one ISC, from each of the at least one communication service providers.

9. The system of claim 1 wherein the at least one ISC is further configured to relay the MRL for each of the at least one communication services to one or more of the system entities.

10. The system of claim 9 wherein the system entities may include at least one of: a transport association controller (TAC), association state manager (ASM), message broker (MB), and another integrated services controller (ISC).

11. The system of claim 1 wherein the at least one ISC is further configured to receive an event registration list (ERL) defining one or more events for each of the at least one communication services registering notification interest in said events by said at least one communications services, whereby the at least one ISC is further configured to relay the ERL for each of the at least one communication services to one or more of the system entities.

12. The system of claim 11 wherein the one or more system entities may include at least one of: transport association controller (TAC), association state manager (ASM), message broker (MB), and another integrated services controller (ISC).

13. The system of claim 1 wherein the at least one ISC is further configured to receive a profile of service-specific parameters settable by at least one of a customer or

the service which may contain one or more variable entries from each of the at least one communication services defining a service profile for said at least one communication service.

14. The system of claim 13 wherein the service profile adheres to a profile schema pre-defined by the at least one ISC which includes at least one master key field shared across the at least one communication services and may comprise at least one service-specific field unique to each of the at least one communication services.

15. The system of claim 14 wherein the profile schema defines a visibility attribute settable by the at least one communication service providing at least one level of visibility setting that defines whether the service-specific fields for said service are visible to other services when merged by the at least one ISC.

16. The system of claim 14 wherein the profile schema supports a default entry for each of the at least one service-specific field settable by at least one of a customer or the service wherein if defined establishes a default setting for said field whereby all other entries in the profile schema establish exceptions to the default entry.

17. The system of claim 14 wherein the profile schema supports a child ISC modifiability attribute for each of the at least one master key field and each of the at least one service-specific field settable by at least one of a customer or the service wherein if defined establishes a default setting of modifiability for said field by other child ISCs related to said at least one ISC.

18. The system of claim 13 wherein the current entry values for the at least one master key field and possible service-specific field in the service profile are dynamically communicated, through an interactive exchange of one or more commands,

from each of the at least one communication services to the at least one ISC at the time the said service is installed.

19. The system of claim 13 wherein the at least one ISC is further configured to automatically merge shared master key fields of the service profile from each of the at least one communication services and append corresponding service-specific fields from each of the at least one communication services into a merged multi-service profile (MMSP).

20. The system of claim 19 further comprising a user interface connectable to the at least one ISC which provides for viewing and editing access to all or a portion of the MMSP.

21. The system of claim 1 wherein a first ISC is further configurable to communicate with at least one other ISC to provide inter-ISC integration.

22. The system of claim 21 wherein one of the at least one ISCs may be configured as a master ISC and another of the at least one ISCs may be configured as a remote ISC relative to the master ISC for a specific customer.

23. The system of claim 22 wherein the master ISC may restrict access to the at one or more messages and capabilities of the remote ISC.

24. The system of claim 21 wherein a plurality of the at least one ISCs may be configured as peer ISCs.

25. The system of claim 21 wherein one of the at least one ISCs may be configured as a standalone ISC within a hierarchy of the at least one ISCs.

26. The system of claim 21 wherein each of the at least one ISCs may be configured as at least one of: a master ISC to other remote ISCs, a remote ISC to other of the master ISCs, a peer ISC to other peer ISCs, or a standalone ISC.

27. The system of claim 21 wherein the other ISC may be provisioned in the same network domain operated by the same communication service provider as the first ISC.

28. The system of claim 21 wherein the at least one other ISC may be provisioned in a different network domain operated by a different communication service provider as the first ISC.

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29. A method for providing integrated control of at least one communication service provided by at least one communication service provider comprising the steps of:

configuring at least one Integrated Service Controller (ISC) to establish a connection with a plurality of communications networks, so as to communicate control messages with system entities; and

dynamically receiving at least one message registration list (MRL) through an interactive exchange of one or more commands from the at least one communications service provider, registering one or more messages for which the at least one communications service has a notification interest;

30. The method of claim 29 wherein the at least one ISC is further configured to provide centralized prioritized processing for the messages exchanged with the other system entities through use of intelligent prioritization rules.

31. The method of claim 30 wherein the at least one ISC is further configured to control the at least one communication service for an individual person customer.

32. The method of claim 31 wherein the at least one ISC is further configured as a child member within a group all related to a parent ISC that manages a customer group of related individual persons or a group of related ISC groups.

33. The method of claim 30 wherein the at least one ISC is further configured to control the at least one communication service for a plurality of individual person customers.

34. The method of claim 30 wherein the at least one ISC is further configured to monitor the high-level current state of each of the at least one communication services.

35. The method of claim 29 wherein the intelligent prioritization rules are dynamically configurable by the at least one communications service provider so as to effect the prioritization of the at least one communication services by the at least one ISC.

36. The method of claim 29 wherein the message registration list (MRL) is statically established with the at least one ISC through parameters set within the at least one ISC, from each of the at least one communication services provider.

37. The method of claim 29 wherein the at least one ISC is further configured to relay the MRL for each of the at least one communication services to one or more of the system entities.

38. The method of claim 37 wherein the system entities may include at least one of: a transport association controller (TAC), association state manager (ASM), message broker (MB), and another integrated services controller (ISC).

39. The method of claim 29 wherein the at least one ISC is further configured to receive an event registration list (ERL) defining one or more events from each of the at least one communication services registering notification interest in said events by said at least one communications services, whereby the at least one ISC is further configured to relay the ERL for each of the at least one communication services to one or more of the system entities.

40. The method of claim 39 wherein the one or more system entities may include at least one of: transport association controller (TAC), association state manager (ASM), message broker (MB), and another integrated services controller (ISC).

41. The method of claim 29 wherein the at least one ISC is further configured to receive a profile of service-specific parameters settable by at least one of a customer or

the service which may contain one or more variable entries from each of the at least one communication services defining a service profile for said at least one communication service.

42. The method of claim 41 wherein the service profile adheres to a profile schema pre-defined by the at least one ISC which includes at least one master key field shared across the at least one communication services and may comprise at least one service-specific field unique to each of the at least one communication services.

43. The method of claim 42 wherein the profile schema defines a visibility attribute settable by the at least one communication service providing at least one level of visibility setting that defines whether the service-specific fields for said service are visible to other services when merged by the at least one ISC.

44. The method of claim 42 wherein the profile schema supports a default entry for each of the at least one service-specific field settable by at least one of a customer or the service wherein if defined establishes a default setting for said field whereby all other entries in the profile schema establish exceptions to the default entry.

45. The method of claim 42 wherein the profile schema supports a child ISC modifiability attribute for each of the at least one master key field and each of the at least one service-specific field settable by at least one of a customer or the service wherein if defined establishes a default setting of modifiability for said field by other child ISCs related to said at least one ISC.

46. The method of claim 41 wherein the current entry values for the at least one master key field and possible service-specific field in the service profile are dynamically communicated, through an interactive exchange of one or more commands,

from each of the at least one communication services to the at least one ISC at the time the said service is installed.

47. The method of claim 41 wherein the at least one ISC is further configured to automatically merge shared master key fields of the service profile from each of the at least one communication services and append corresponding service-specific fields from each of the at least one communication services into a merged multi-service profile (MMSP).

48. The method of claim 47 further comprising a user interface connectable to the at least one ISC which provides for viewing and editing access to all or a portion of the MMSP.

49. The method of claim 29 wherein a first ISC is further configured to communicate with at least one other ISC to provide inter-ISC integration.

50. The method of claim 29 wherein one of the at least one ISC's may be configured as a master ISC and another of the at least one ISC's is configured as a remote ISC relative to the master ISC for a specific customer.

51. The method of claim 50 wherein the master ISC may restrict access to the one or more messages and capabilities of the remote ISC.

52. The method of claim 49 wherein a plurality of the at least one ISCs may be configured as peer ISCs.

53. The method of claim 49 wherein one of the at least one ISCs may be configured as a standalone ISC within a hierarchy of the at least one ISCs.

54. The method of claim 49 wherein each of the at least one ISCs may be configured as at least one of: a master ISC to other remote ISCs, a remote ISC to other of the master ISCs, a peer ISC to other peer ISCs, or a standalone ISC.

55. The method of claim 49 wherein the other ISC may be provisioned in the
5 same network domain operated by the same communication service provider as the first ISC.

56. The method of claim 49 wherein the at least one other ISC may be provisioned in a different network domain operated by a different communication service provider as the first ISC.